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(54) APPARATUS AND METHOD TO CONTROL GOB WEIGHT, LENGTH AND/OR SHAPE

(57) An improved system and method for forming falling hot glass gobs which will be molded into glass containers in an Individual Section (IS) machine is disclosed which controls the weight, length, and shape of such glass gobs as they are produced. The system includes a gob feeder apparatus and a gob shearing mechanism a controller using models being used to correlate the effect of a number of feeder control settings on gob weight, length, and, shape. The controller is configured to adjust

various feeder control settings based on a prioritized order of the feeder control settings such that gobs having different physical characteristics for different ones of the individual sections can be produced during a single machine cycle. By implementing the models, a closed loop system has been developed to set up controls to achieve the desired gob forming for each individual section and cavity.

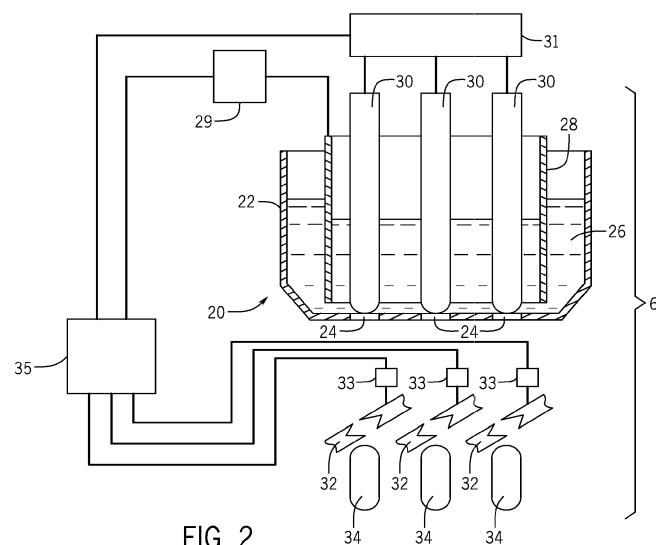


FIG. 2



EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
10 A	EP 1 418 158 A1 (NIHON YAMAMURA GLASS CO LTD [JP]) 12 May 2004 (2004-05-12) * paragraph [0021] - paragraph [0043] * * figures 1-4 * -----	1-21	INV. C03B7/00 G05B13/04
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50 1	The present search report has been drawn up for all claims		
55	Place of search The Hague	Date of completion of the search 14 January 2020	Examiner Hauser, Leon
EPO FORM 1503 03-82 (P04C01) CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT
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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-01-2020

10	Patent document cited in search report	Publication date		Patent family member(s)	Publication date
15	EP 1418158	A1	12-05-2004	AT 489339 T EP 1418158 A1 ES 2356618 T3 JP 4257906 B2 JP W02003008348 A1 US 2004194506 A1 WO 03008348 A1	15-12-2010 12-05-2004 11-04-2011 30-04-2009 02-12-2004 07-10-2004 30-01-2003
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